

### AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with deleted material crossed out and new material underlined to show the changes made.

Claims 1-28. (Canceled)

29. (New) A composition comprising GnRH and Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof.

30. (New) A composition according to claim 29, wherein the Kiss-1 peptide fragment is the fragment 45-54 of Kiss-1.

31. (New) A composition according to claims 29 or 30, wherein the ratio of the GnRH to Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof, is in the range 10:1 to 1000:1 in Molar concentration.

32. (New) The composition according to any of one of the claims 29 to 31 for its therapeutic use in the treatment of a gonadotropin related reproductive disorder.

33. (New) The composition according to claim 32 wherein the therapeutic use is the treatment of LH and/or FSH related disorders.

34. (New) The composition according to claim 32 wherein the therapeutic use is the stimulation of ovulation.

35. (New) The composition according to claim 32 wherein the therapeutic use is to positively modulate LH synthesis.

36. (New) Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof for the use as an addition to a treatment for the stimulation of ovulation by GnRH.

37. (New) Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof for the use according to claim 36 wherein the Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof positively modulates the GnRH effect on LH synthesis stimulation.

38. (New) A Kiss-1 peptide fragment for the use according to claims 36 or 37, wherein the Kiss-1 peptide fragments is the fragment 45-54 of Kiss-1.

39. (New) A Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof for the use according to any one of the claims 36 to 38, wherein the ratio of the GnRH to Kiss-1 peptide, Kiss-1 peptide fragments, kisspeptins, or salt thereof, is in the range 10:1 to 1000:1 in Molar concentration.